

REMARKS

Claims 1-9 are all the claims pending in the application. Applicants amend claim 1.

Claim objections

The Examiner objects to claim 1 and suggests amending claim. In view of the claim amendment to claim 1, Applicants respectfully request the Examiner to withdraw the objection to claim 1.

Claim rejections

Claim 1, 3 and 4 are rejected under 35 U.S.C. § 102(e) as being allegedly being anticipated by Atsushi (JP Publication Number 2002-221950). Applicants traverse the rejection for at least the following reasons.

As a preliminary matter, Applicants note that since Atsushi is a foreign publication, a rejection based on 35 U.S.C. § 102(e) is improper.

Claim 1

Claim 1 recites, *inter alia*, “a gamma correction memory in which a plurality of N-bit input grayscale levels are mapped to a plurality of K-bit output grayscale levels which are distributed on a non-linear curve corresponding to a non-linear curve on which grayscale levels of a display device are distributed, when said N-bit output video signal of said bit rate converter corresponds to one of the plurality of N-bit input grayscale levels, said gamma correction memory delivering one of the plurality of K-bit output grayscale levels to said display device.” The Examiner asserts that Atsushi discloses the unique features of claim 1 recited above. Applicants respectfully disagree for at least the following reasons.

Atsushi is directed to a display device using color reduction to store data in a small memory. Atsushi discloses a pseudo-gradation processing means 10 which receives the display data and performs a subtractive color by pseudo-gradation processing. The pseudo-gradation processing means 10 carries out the subtractive color the R component to 4 bits, and G component to 5 bits and the B component to 3 bits. A frame memory 11 stores the subtractive color output from the pseudo-gradation processing means. Furthermore, Atsushi discloses a gradation amendment means 12 that converts 12 bit data of the frame memory 11 to an 18 bit data to be used by the driving means 13 (paragraph [0071]-[0082]). However, Atsushi does not disclose a **gamma** correction memory in which a plurality of N-bit input grayscale levels are mapped to a plurality of K-bit output grayscale levels **which are distributed on a non-linear curve corresponding to a non-linear curve on which grayscale levels of a display device are distributed.**

Specifically, in paragraph [0073-0076], Atsushi discloses a processing means 10 performing **subtractive color** on the RGB components. The output from the processing means 10 is stored in the frame memory 11. That is, the frame memory 11 stores an R component made to 4 bits, G component made to 5 bits and a B component made to 3 bits. Furthermore, in paragraph [0082], Atsushi discloses that drawing 8 of Atsushi illustrates a process similar to drawing 1, except drawing 8 discloses that all of the RGB components are made to 4 bits (instead of 4, 5 and 3 as illustrated in drawing 1).

However, Atsushi does not disclose a **gamma correction** memory and mapping the N-bit input grayscale levels to a K-bit output grayscale levels which are distributed on a **non-linear**

curve corresponding to a non-linear curve on which grayscale levels of a display device are distributed.

Applicants submit that Atsushi discloses performing **subtractive color processing** on RGB components, storing the subtractive color processed result in a frame memory and driving a display using data attained from processing the subtractive color processed result stored in the frame memory; it does not disclose a **gamma correction memory** which maps input grayscale levels to output grayscale levels based on the non-linear curve on which grayscale levels of the a display are distributed.

In addition, Applicants submit that in paragraph [0077], Atsushi discloses that the gradation correction means 12 of FIG. 1 uses a one-dimensional bit conversion table as shown in FIG. 6 in which 4-bit red component, 5-bit green component and 3-bit blue component are converted to 6-bit data. However, Atsushi does not disclose “**gamma correction**”.

In view of the above, Applicants submit that claim 1 is allowable over the cited reference.

Claims 3 and 4

Applicants submit that claims 3 and 4 depend from claim 1, and therefore are allowable at least by virtue of their dependency. Applicants traverse the rejection for at least the following reason.

Claims 2 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Atsushi in view of Lumelsky et al. (5,196,924). Applicants traverse the rejection for at least the following reason.

Claims 2 and 5

Applicant submit that since claims 2 and 5 depend from claim 1 and since Lumelsky does not cure the deficiency noted above with regard to claim 1, claims 2 and 5 are allowable at least by virtue of their dependency and the additional limitation thereof.

Furthermore, Applicant submits that it would not have been obvious to combine the teachings of Atsushi and Lumelsky for at least the following reasons.

Atsushi is directed performing subtractive color on RGB components to reduce memory. On the contrary, Lumelsky is directed to look-up table based gamma and inverse gamma correction. Since Atsushi and Lumelsky are directed to different types of processing on a display image, it would not have been obvious to one of ordinary skill in the art to combine the two teachings as asserted by the Examiner. For instance, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to combine or modify the subtractive color process with a gamma correction process.

Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Atsushi in view of Lu et. Al (US 7,085,016).

Claim 7

Applicants submit that since claim 7 depends from claim 1 and since Lu does not cure the deficiency noted above with regard to claim 1, claim 7 is allowable at least by virtue of their dependency and additional limitations thereof.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Amendment Under 37 C.F.R. § 1.116
U.S. Appln No. 10/812,056

Attorney Docket NO. Q80548

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

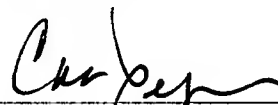
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